

CLAIMS

1. Mineral wool capable of dissolving in a physiological medium, characterized in that it comprises the constituents below in the following percentages by weight:

	SiO ₂	39 - 44%, preferably 40 - 43%
	Al ₂ O ₃	16 - 27%, preferably 16 - 26%
	CaO	6 - 20%, preferably 8 - 18%
10	MgO	1 - 5%, preferably 1 - 4.9%
	Na ₂ O	0 - 15%, preferably 2 - 12%
	K ₂ O	0 - 15%, preferably 2 - 12%
	R ₂ O (Na ₂ O + K ₂ O)	10 - 14.7%, preferably 10 - 13.5%
15	P ₂ O ₅	0 - 3%, especially 0 - 2%
	Fe ₂ O ₃ (total iron)	1.5 - 15%, especially 3.2 - 8%
	B ₂ O ₃	0 - 2%, preferably 0 - 1%
	TiO ₂	0 - 2%, preferably 0.4 - 1%.

20 2. Mineral wool according to Claim 1, characterized in that the CaO content is between 9.5 and 20%, preferably between 10 and 18%.

25 3. Mineral wool according to either of the preceding claims, characterized in that it contains 20 to 25% alumina.

30 4. Mineral wool according to one of the preceding claims, characterized in that it contains at least 2%, especially around 2 to 5%, MgO when alumina is present in an amount of less than 22%, especially from 17 to 22%, and in that it contains 1 to 4%, preferably 1 to 2%, MgO when alumina is present in an amount of at least 22% by weight.

35 5. Mineral wool according to one of the preceding claims, characterized in that the alkali metal oxide content is preferably less than or equal to 13.0%, especially around 10 to 12.5% and in particular 12% or

less.

6. Mineral wool according to one of the preceding claims, characterized in that the R_2O/Al_2O_3 molar ratio
5 is less than 0.9, especially at most 0.8 and in particular at most 0.75.

7. Mineral wool according to one of the preceding claims, characterized in that it contains 2 to 6% iron
10 oxide.

8. Mineral wool according to one of the preceding claims, characterized in that it contains 1% titanium oxide or less.
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9. Mineral wool according to one of the preceding claims, characterized in that it has a viscosity at a temperature of 1400°C of more than 70 poise, especially around 75 to 250 poise.
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10. Mineral wool according to one of the preceding claims, characterized in that its composition has a shrinkage at 700°C of less than 40% and a shrinkage at 800°C of less than 90%.
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11. Use of a mineral wool according to one of the preceding claims in fire-resistant structural systems or as insulation employed at high temperature.